

Wood Buffalo National Park

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ALBERTA W. TERRITORIES



Below: Pine Lake



Fox, lynx, mink, ermine and red squirrel are also common. Altogether 46 species of mammals have been recorded in the park.

More than 200 species and sub species of birds have been reported in the park. Most of these are summer residents and are species familiar to bird watchers in western Canada and the United States. The accumulation of water-fowl on the Peace-Athabasca delta in autumn is one of the greatest spectacles of its kind to be found anywhere. Throughout the park ruffed sharp-tailed and spruce grouse reach extremely high peaks of abundance about once each decade, and then for two or three years they almost disappear from the scene. Gulls, both eastern and western species, are common wherever the fishing is good, such as at the foot of the Slave River rapid at Fort Smith. Here, too, is found the northernmost colony of pelicans in North America. Hawks, eagles, owls and ravens are present throughout the park.

A recent addition to the known life of the park, and in many ways the most dramatic, is the nearly extinct whooping crane. The nesting ground of this rare species was discovered when a family of the birds was seen in 1954 by a federal forest engineer, and his observation was confirmed by a biologist of the Canadian Wildlife Service. The 1975 crane population was 73 including 24 in captivity.

Park History

The park is one of the earliest explored and settled areas of Alberta. In 1789 Alexander Mackenzie travelled down the Slave River on his trip to the Arctic Ocean, and up the Peace River on his way to the Pacific a few years later. Simon Fraser also travelled up the Peace River. He visited the original Fort Chipewyan on Lake Athabasca, which was built in 1788, and is the oldest permanent settlement in Alberta. Salt River Settlement, downriver from Fort Smith, was settled in the 1870's. The Athabasca, Peace and Slave Rivers, leading to the Mackenzie, were for years

Cover: Two bison bolts

Introducing a park and an idea

Canada covers half a continent, fronts on three oceans and stretches from the extreme arctic more than half-way to the equator.

There is a great variety of landforms in this immense country, and national parks have been created to preserve important examples for you and for generations to come.

The National Parks Act of 1930 specifies that national parks are "dedicated to the people... for their benefit, education and enjoyment" and must remain "unimpaired for future generations."

Wood Buffalo National Park is a wilderness area of 17,300 square miles straddling the boundary between the Northwest Territories and the Province of Alberta. It was established in 1922 to protect the only remaining herd of wood bison.

The park's greatest length is 176 miles and it has an average width of more than 100 miles. Two-thirds of its area is in northern Alberta.

The park environment

Wood Buffalo contains examples of four types of topographical features common to the northern plains. These are erosion plateaus left by the glaciers, glaciated plains, a delta formed by two major rivers, and the alluvial lowlands of the rivers. In addition, there are two special types of area not common in Canada: the Salt Plains and the Karst area of the Alberta Plateau.

Erosion plateaus

The Birch Mountains in the southwest and the Caribou Mountains in the west are erosion plateaus of the Cretaceous Age, about 150 million years old. They are round to oval plateaus, 2,500 and 3,200 feet above sea level respectively, rising abruptly from almost flat plains. They are all that remain of deep sedimentary layers which covered the whole area and which elsewhere were removed by erosion. The plateaus give rise to many fast streams, which have cut deep, rugged gullies in the escarpments.

Glaciated plains

The major area of Wood Buffalo National Parks is the Alberta Plateau. This is a large, almost flat glacial outwash plain which extends over a great part of this country, in and out of the park. It is between 700 and 1,100 feet above sea level, a land of poor drainage, meandering streams and many shallow lakes and bogs. Throughout the plains, sand dunes and eskers (long, low ridges of sand and gravel) are scattered. Eskers are composed of material that was carried by

Folded rock beds on Peace River



the glaciers and deposited along the course of streams formed in the melting ice.

The eastern edge of the Alberta Plateau is marked by an escarpment with a maximum height of 200 feet. It is noticeable on Highway 5 as a steep hill west of the Salt River. Little Buffalo Falls, reached on a side road just east of the park boundary, and the canyon below the falls, is another and very picturesque example.

Karst Topography

This is the name given to land underlain by soft rocks, which are dissolved in places by sub-surface runoff and result in collapsed areas or sinkholes, some of great size. There is a large sinkhole, 120 feet across and 80 feet deep, beside the Angus Tower. Pine Lake, with a depth of 70 feet, three miles long, results from the joining of several very large sinkholes.

The Salt Plains

East of the escarpment, in an area drained by the Salt River, are the salt plains. These are flat, mostly open areas with many salt streams and salt springs. In some parts the ground has such a high salt content that there is no plant life. In other areas there are plant communities composed of salt-tolerant species only. Some of the salt springs leave deposits of salt

around them through evaporation of the water. This was the source of salt for Indians, explorers and early settlers. A side road from Highway 5 to the east side of the Salt River passes close to the Salt Plains.

The river valleys and low lands

The Peace River occupies a wide, flat valley with very little drop along its course. This causes the river to meander and change its course from time to time. Davidson Lake and Big Slough are remains of old river courses.

The Slave River lowlands occupy only small areas along the west side of the river above Fort Smith. Here the river marks the boundary between the Precambrian Shield and the Great Central Plains. On the east are old, eroded granite formations; on the west are the younger sedimentary rocks which underlie the Canadian prairies.

The delta

The delta formed by the Peace and Athabasca Rivers is one of the major deltas in Canada. During the time the glaciers were melting, Lake Athabasca was far larger than it is now. As the ice retreated further and freed the north-flowing Slave River, much of the Lake was drained. Silt carried by the large rivers filled in much of the area, creating the present delta of winding channels, shallow lakes and mud flats. The seasonal cycle of high and low water flowing from these rivers into the delta has created plant communities vital to the bison, muskrat and waterfowl populations of the park.

Plant life

Plants in the park are typical of the boreal forest zone of Canada. White and black spruce, jack pine and tamarack predominate. Black poplar is found along many water courses and aspen occurs in nearly pure stands on some upland sites and in places where the spruce forest has been destroyed by fire. Interspersed with the forests are numerous bogs or muskegs. There are also patches of prairie dominated by grasses and such showy flowering species as shooting star, bluebell, goldenrod, aster, and gentian. The flora of the salt plains is composed of species that tolerate a high salinity. The flats of the Peace-Athabasca delta contain extensive cattail marshes and sedge meadows. There are extensive stands of white spruce forest along the banks of the Peace, Athabasca and Birch Rivers. Balsam poplar also is plentiful in the area.

Natural succession of plants and forests

The park shows all stages of plant and forest succes-

sion. Most of the upland prairies, if not due to poor drainage, are due to forest fires, usually caused by summer lightning. A large number of forest fire burns at various stages of regeneration can be observed along the highway and park roads. These are marked by dense, even-aged stands of young jackpine, which grow amidst dead and fallen trees, providing fuel for further fires. Then, if there is a fire, the cycle starts all over again. Other areas with other types of soil have a more complicated cycle. There the cycle is likely to be grassland, willow, willow-poplar, poplar, spruce, spruce, if undisturbed by fire in between. Eventually, through random chance, lightning will strike in the old and decayed spruce forest and fire will restart the cycle. This type of succession is illustrated by a 1961 burn, eight miles west of the Carlson Landing, which is in the willow stage. Between Fitzgerald and Hay Camp lies an older burn area in the willow-poplar stage. Fifteen miles north of Peace Point there is an area of mature poplar with younger spruce which by now reach almost to the poplar crowns. The pure spruce stands seen east of Peace Point are an example of the climax stage in this cycle of succession.

Wildlife

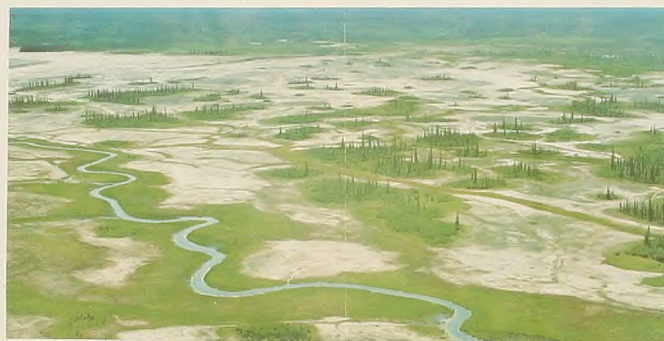
The bison, for whose protection the park was established, is symbolic of pioneer North America and man's waste of natural resources. When the killing of wood bison was prohibited in 1893 it was estimated that there were fewer than 500 remaining, all in the region of what is now the park. By 1922 their numbers had grown to an estimated 1,500. The wood bison is a slightly larger, darker, northern relative of the plains bison.

Shortly after the establishment of the park more than 6,000 plains bison were moved by rail and barge from Buffalo National Park (now non-existent) at Wainwright, Alberta, to Wood Buffalo National Park. The two species intermingled and now number 7,000 to 9,000.

Other large animals in the park are moose, woodland caribou and black bear. The southward winter migration of barren-ground caribou used to carry them into the park in large numbers for two or three months each winter, but in recent years they have passed 50 miles northeast of the park. There are a few mule deer and white-tailed deer in the park, but the country is not really suitable for them.

Smaller mammals are locally abundant in various areas throughout the park. Suitable streams are well populated with beaver and the marshy delta areas provide ideal habitat for large numbers of muskrats.

Salt Plains



they have previously registered with a park warden and obtained a campfire permit.

Supplies, services and accommodation are available in Hay River, Fort Smith and Fort Chipewyan. Fitzgerald no longer exists as a town.

How to enjoy the park

Roads — The main park roads are open throughout the year, but during spring breakup or after heavy rains they may be soft in places. Visitors are asked to check with the park office in Fort Smith for current road conditions.

Boating — Under permit, motor boats may be used on Pine Lake, the Peace, Slave and Athabasca Rivers and the delta channels connecting Lake Athabasca to the Peace and Slave Rivers. All motor boats must carry proper safety equipment and conform with federal navigation regulations.

Fishing — Pike and pickerel (walleye) are found in many of the shallow lakes and sluggish streams in the park. Goldeye are present in the lower Peace River. Pine Lake and the Rainbow Lakes are stocked with trout. Whitefish, suckers and inconnu (somewhat like whitefish) are also found.

It is necessary to have a fishing permit when fishing in the park. Permits may be obtained for a nominal

fee from any park warden, the Pine Lake campground attendant or the park office in Fort Smith. Fishing regulations are available at the same locations. **Cross Country Skiing and Snowshoeing** — Trails have been prepared for winter use. A brochure on winter use is available from the park office.

Some don'ts

National parks are selected areas set apart as nature sanctuaries and special care is taken to maintain them in their natural state. For this reason, all wildlife, including birds and animals, and all plants, trees, rocks and fossils are to be left undisturbed. Even the wild flowers are not to be picked; leave them for others to enjoy. Feeding, touching or molesting wild animals is not permitted.

Dogs and cats may accompany visitors into the park. For protection of park animals, however, dogs must be kept on leash. No permit or vaccination certificate is needed.

Fires

Campfires may be set only in fireplaces provided for this purpose, or in outdoor portable stoves. Barbecues may be used only in the campground or the picnic area, and all coals must be dumped into existing park

fireplaces. Fire permits must be obtained from a park warden for open fires during back-country travel.

Anyone finding an unattended fire should try to extinguish it, or if it is beyond control, report it at once.

Interpretation

Although as yet there are no identified hiking or riding trails, the park does offer conducted hikes, evening slide programs, guided canoe trips and winter programs, conducted by the park naturalists. Tours for special groups can also be arranged. Further details on times and locations may be obtained from the park office in Fort Smith. Trips by car, boat, and foot provide views of the salt plains, the escarpment, sinkholes, sinkhole lakes, plateau forests and wildlife.

Murdock Creek, the Little Buffalo River, and many of the small lakes, provide good canoeing. The major rivers and the delta area provide attractive power boat trips, but care must be taken to avoid mudbanks and other under water obstacles. The visitor is urged to check on conditions and register with the park warden service before and after river trips.

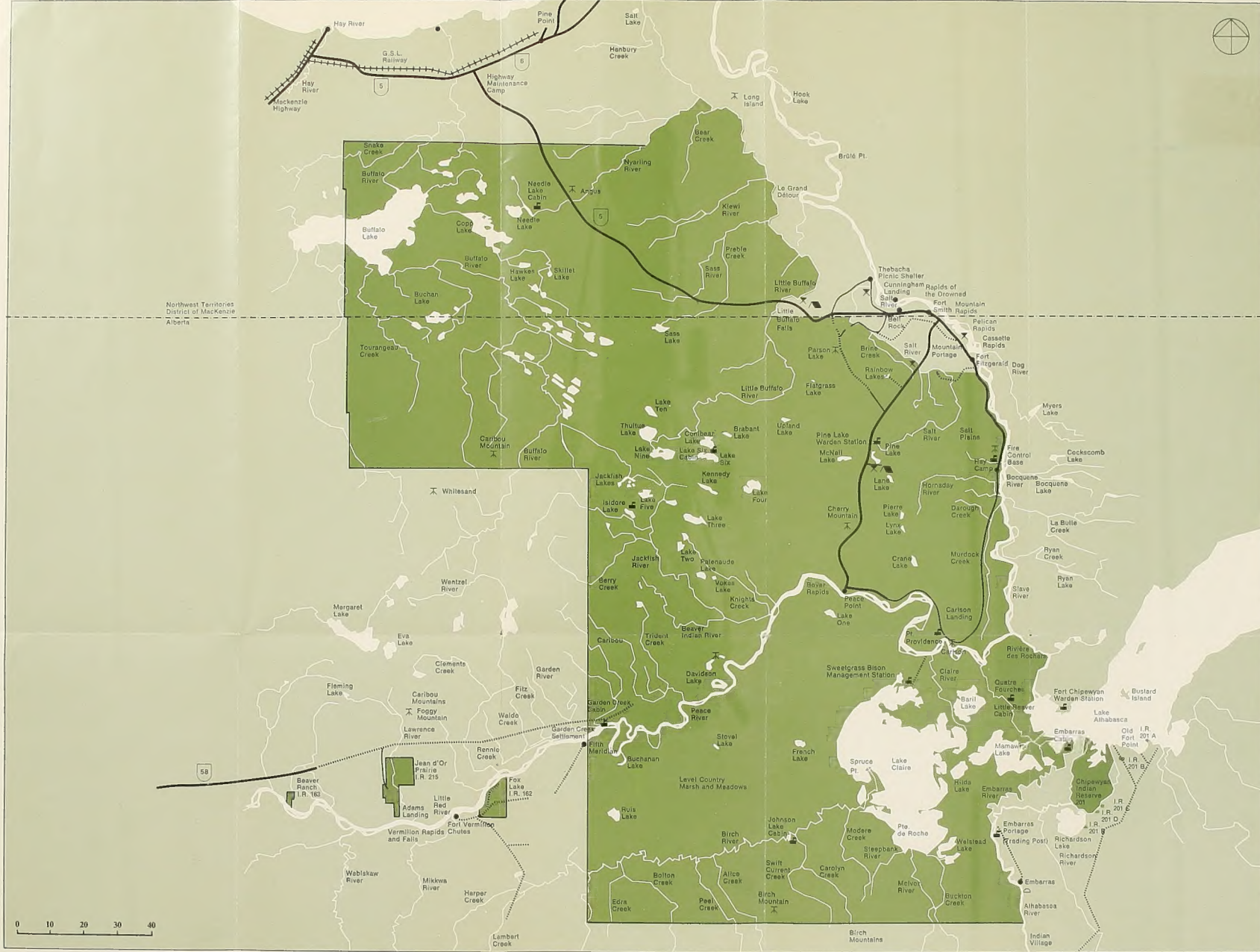
For more information...

Prospective visitors may obtain information on the park by writing to the Superintendent, Wood Buffalo National Park, Fort Smith, Northwest Territories XOE 0P0. Request for information on other national parks should be addressed to the Director, National and Historic Parks Branch, Department of Indian Affairs and Northern Development, Ottawa, Ontario K1A 0H4.

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Note
This is but a reference map, designed to give you a general idea of what you will find in this park. It is not a road, hiking or boating map. To find your way accurately, you should obtain a topographical map, available from the Department of Energy, Mines and Resources, Surveys and Mapping Branch, 615 Booth Street, Ottawa, Ontario, K1A 0E9.

- Legend**
- Highway (All Weather Road)
 - Secondary Road (Dry Weather Road)
 - Trail
 - Lake, River, Creek
 - Patrol Cabin
 - ▲ Picnic Area
 - Campground
 - ▲ Fire Tower
 - △ Sawmill
 - U Highway Number



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